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A NEW GORTYNA, AND NOTES ON THE GENUS.

BY HENRY H. LYMAN, M. A., MONTREAL.

I use the name *Gortyna* in preference to *Hydracia* as, without pretending to be an authority upon the question, it appears to me that there is better authority for the former, as used by Mr. Grote, than for the latter. My acquaintance with the moths of this genus, which I have always admired, dates back about thirty years, but in spite of that length of time my knowledge of them up till last year was of the most meagre description, and apart from the species which has stood so long in our collections under the name *Nictitans*, and a few specimens of *Velata*, Walk., I only possessed about half a dozen specimens, mostly in poor condition, representing *Immanis*, *Stramentosa*, *Rigida*, *Nebis*, *Rutila*,* and a form which Mr. Bird believes to be new.

It may be of some interest to point out that the specimen of *Rigida* referred to was taken by me probably between 1873 and 1875, and was lent, among other specimens, for the Society's exhibit at the Centennial Exhibition at Philadelphia, in 1876, and was returned to me under the name *Purpurifascia*, *Rigida* not having been described till the following year. For some reason which I cannot understand, the two forms *Nitela* and *Nebis* have, since the issue of Grote's Check List of 1882, stood in our catalogues under the specific name *Nitela* and the varietal name *Nebis*. If the *Nitela* form were the prevailing one, with the form *Nebis* much less frequent, the position thus given them would be quite natural, but if, as I understand is the case, the two forms occur in practically equal numbers, the name *Nebis* should take precedence as

*There is some uncertainty as to whether this form is the true *Rutila*.

the name of the species, with *Nitela* as the varietal name, on the ground of priority, as Guenée described *Nèbris* first and then *Nitela*, saying: "Taille et couleur de la *Nèbris*, dont elle ne diffère que par l'absence complète des taches blanches, et les palpes un peu plus longs et plus ascendants."†

An additional reason for this position, if any were needed, is that *Nèbris* has the typical markings of the genus, while *Nitela* departs from the type.

Another matter to which I am obliged to take exception is the giving of the name *Atlantica* by Prof. J. B. Smith to the form which had been supposed to be identical with the *Nictitans* of Europe. Speyer had recognized at least a varietal difference in 1875, and named the American form var. *Americana*, and if its specific distinctness be recognized, Speyer's name must be used, as there is no warrant under the law of priority for setting it aside.

Last year I was informed by Mr. Winn and Mr. Brainerd, between the middle and end of July, that the larvæ of *Rutilla* could be obtained commonly, boring in the burdock. I was not able to look for them at once, but went out early in August, and succeeded in finding about half a dozen-bored stems, which I took home. Later, on cutting them open to see if I had anything, I found the burrows in all but one tenanted only by wood-lice and slugs, but in the last one opened I found a pupa. This I kept in the stem, under a glass shade, and about September 1st the imago emerged and proved to be new to our members, but Dr. Dyar to whom I subsequently showed it, thought it only a varietal form of *Necopina*.

Shortly afterwards I went to Europe, but did not take the specimen with me, as my trip was a hurried one, and I was afraid it might meet with some accident, but when visiting the British Museum I looked up the specimens in this genus, but could not find anything to agree with it. I naturally became much interested in the group, and through the kindness of friends, especially Mr. Henry Bird, by a few purchases and by my work during the past season, have succeeded in getting together a fair representation of most of the North American forms.

This year I again searched in the same locality, a little earlier in the season, and secured five or six of the larvæ, and succeeded in rearing five

†Spec. Gen. Noct. I., 124.

more of the moths, and as the form differs from *Necopina*, the only species with which, in my opinion, it could possibly be confused, not only in the imago, but also in the larval and pupal stages, I have no hesitation in describing it, as a new species.

Gortyna Ærata, n. sp.

Very similar in general appearance to *G. Necopina*. The colour of the primaries more bronzy, especially in the median space, and with a distinct purplish or sometimes dull mauve shade beyond the t. p. line.

Head and thorax similar in colour to the primaries, powdered with white atoms, as in *Necopina*; abdomen lighter, similar in shade to the secondaries, and more evenly gray. In *Necopina* the dorsal tuft is somewhat conical, and projects forward, while in *Ærata* it is more transverse and slopes backward. Antennæ brown or grayish, slightly marked with whitish, springing from a whitish collar.

The wings, especially the primaries, are also somewhat powdered with white, but much less so, and, in general, less evenly so, than in *Necopina*. Of the types, the one which comes nearest to *Necopina* is No. 5, and in this the powdering is almost as even as in that species. The markings, as a rule, are obscure, especially in the flown specimens, but the t. p. line is generally fairly well marked, and the t. a. line can occasionally be made out either in whole or in part.

In five out of the six bred specimens there are a few yellowish spots or dots running in from the costa a little before the apex, and in four out of the six there are on costa of primaries four yellowish dots, the first being just above the reniform and the others between it and the pre-apical series, at about equal distances apart. The t. p. line, when strongly marked, as in type No. 6, a most remarkable specimen, is seen to be double, and sometimes, as in type No. 2, the space within the lines is more or less filled with yellowish scales.

The orbicular and reniform are generally obsolete, or, at most, indicated by dark shades only, but in type 6 both are present, the former only represented by a yellowish dot, but the latter well developed and consisting of a central curved brownish-yellow line surrounded by five or six yellowish or whitish spots of varying size and shape.

In several of the specimens there is a purplish or dull mauve shading within the t. a. line, or between it and where the basal line should be. The s. t. line, when shown, is strongly dentate, but is generally indicated merely by the difference in shade between the dull mauve within and the

bronzy shade beyond it, though its course is sometimes indicated by a few yellowish scales. The secondaries are paler than in *Necopina*, the veins dark, and generally with a discal mark and a submarginal dark shade. Both wings show a double terminal dark line, but naturally this is more evident on the lighter secondaries.

Fringes of primaries dark, slightly mottled with mauve gray, of secondaries lighter. Beneath, primaries dark brownish gray, lighter towards inner margin, secondaries dark on costal margin and especially at apex, the rest lighter, with a dark discal spot and median line. Both wings more or less powdered as above. Feet brown, fore tarsi marked with whitish.

Expanse 32 to 43 mm.

Described from nine specimens, 4 ♂ and 5 ♀, six bred by me between August 24th and September 6th and now in my collection, and three, Nos. 7-9, captured by Mr. Winn on September 10th and 14th, which are in his collection.

The food-plant of the larva, as already mentioned, is burdock (*Arctium Lappa*, L.), and the larvæ when found were apparently in the penultimate stage. I intended to make a detailed description, but being exceedingly busy, delayed too long, and when I removed them from their burrows for this purpose I found that they were mature, and, as is usual in this genus, the markings had become too obscure for any description to be of value.

I noticed, however, when I found them that the dorsal and subdorsal lines were continuous, thus differing from *Rutila*, in which only the dorsal line crosses the dark space on the first four abdominal segments, and *Necopina*, in which not even the dorsal line crosses this space.

Pupation sometimes took place in the burrows and sometimes not.

The difference in the pupæ of the two species is also marked, as in *Necopina* there is a frontal tooth-like development, which, as Mr. Bird suggests, appears to be an indication of what occurs in *Ochria*, where a distinct clypeal spur exists, but this is absent in *Erata*, as I was able to verify through his kindness in sending me some pupæ of *Necopina* for comparison.

It is perhaps hardly necessary to add that the specific name which I have given is from *aratus*—overlaid or covered with bronze—from the prevailing bronzy appearance of the primaries.

NEW DIURNAL LEPIDOPTERA FROM SOUTH AMERICA.

BY A. G. WEEKS, JR., BOSTON, MASS.

(Continued from page 296.)

Pythonides hirta, sp. nov.

Habitat: Bogota district, Colombia. Expanse: 1.50 inches.

Head, palpi, thorax and abdomen above, dark mouse colour; beneath, nearly white. Between the eyes are three white dots. Antennæ black. Legs grayish white.

Upper side of fore wing dark mouse colour. There is a broad prominent yellowish-white band extending from costa down to submedian nervure, its inner edge straight, the outer edge swelling outwards somewhat. The interspaces between this distinctive band and the hind margin, also the interspaces upwards towards costa, are heavily dusted with light mouse-coloured scales. The nervures and nervules are nearly black. The hind margin bears a slight hairy fringe and a very slight darkish thread.

Upper side of lower wing dark mouse colour. There is a broad white area covering central half of costa and extending downwards to the median nervure, suffusing somewhat towards hind margin. Outside of this area the interspaces show a little lighter shade than the ground colour. The nervures and nervules are dark. The hind margin has a slight hairy fringe and a very slight darkish thread.

The yellowish-white band of fore wing and the white band or area of lower wings form the prominent marking of upper surface. The rest of the wing is of dark colour, with the slight variations above noted.

The under side of fore wing is divided between white and dead mouse colour. The basal portion within a line drawn from centre of costa down to lower angle is white. The rest of the wing (the apical area) is dead dark mouse colour, the interspaces showing white dashes starting at subcostal interspaces midway between the apex and the edge of the white area. The hind margin has a hairy fringe and a darkish thread.

The lower side of hind wing is white, excepting a broad hind marginal border of dark mouse colour, which suffuses upwards towards base as it reaches the anal angle. At the upper angle there is a sugges-

tion of a white line running through this border just within the margin, but it is very indistinct. The hind margin has a slight hairy fringe of mouse colour and a darkish thread. In some lights the basal area of both wings shows a bluish-gray tinge. The prominent bands of the upper side also show slightly, owing simply to transparency.

Type.—One specimen taken in 1896. A duplicate of this species was found in the Godman collection unnamed, and undoubtedly it has never been described.

Thecla Francis, sp. nov.

Habitat ; Bolivia, near Alezuni. Expanse : .88 inch.

Head, thorax and abdomen above, black, with grayish hairs ; below, grayish white, with yellowish tinge towards end of abdomen. Antennæ above, nearly black, with white annulations at base of each joint ; below, lighter, nearly white towards club. Club somewhat tawny. Legs grayish white.

Upper side of fore wing dead grayish-brown. The area bordered by a line drawn from base up median nervure, thence to a point midway between end of discoidal space and hind margin on first discoidal nervule, and thence straight down to inner margin, shows a decided purplish lustre, evident in almost all lights. The angle at apex and also at lower angle is quite sharp.

Upper side of lower wing the same, except that the lustrous area covers entire wing, barring the costal region and inner marginal edge. The lustrous area is also less purplish than on fore wings, having a more bluish tinge. The hind margin is bordered by a dark thread. At end of submedian nervure there is a short, stumpy tail, not threadlike, but rather a jutting out of the wing area. The nervures and nervules are distinctly darker than ground colour.

Under side of fore wing dead grayish-brown, of a lighter shade than upper surface. One-third distance from apex to base there is a very slight suggestion of a line of interspatial whitish lines, extending downwards parallel to hind margin. It is scarcely perceptible, however.

Under side of hind wing of the same ground colour as fore wing. The whitish line extends downwards to anal angle, being no more prominent than on fore wings, scarcely perceptible. Just above the lower submedian nervule, close to the margin, is a semicircle of light tawny, not

a all prominent, but quite perceptible on close inspection. The basal area of the wing is dusted with dark scales.

Type.—One specimen taken August 8th, 1899.

Nisoniades tihoneta, sp. nov.

Habitat: Bolivia, near La Paz. Expanse: 1.75 inches.

Male.—Head, palpi, thorax and abdomen above, black, with brownish hairs; beneath, black, with red-brown hairs. Antennæ above, black; beneath, lighter, turning to yellowish white at club. The abdomen has a red-brown end.

Fore wing above blackish-brown, with a few lighter hairs in basal area. Near end of discoidal space is a jagged white spot. Midway between this and apex are three subcostal interspacial white dots. On a line drawn from apex down to centre of inner margin is a series of white spots, five in number. The first is scarcely visible, and under it, in next interspace, is a larger spot; below this and nearer the base is another of about the same size; below this and nearer the base is another much larger one; below this and nearer the base, resting on submedian nervure, is another directly under the white discoidal spot. Running from end of discoidal space, starting just inside of the largest white spot, is a distinct white line, ending at submedian nervure and having a background of blackish brown, darker than ground colour. The hind margin has a narrow fringe of hairs of ground colour, but tawny as it approaches lower angle. The white spots are transparent rather than absolutely white.

Hind wing above blackish brown, with tawnyish hairs covering basal area. On a line drawn from upper angle across to the centre of inner margin are four interspacial elongated transparent white spots, the first under the first subcostal nervule, and the rest following in the consecutive interspaces. The fringe of hind margin is tawny, narrow at upper angle, but broadening towards anal angle, and becoming quite prominent.

Under side of fore wing duplicates the white spots of upper surface, the lowest spot showing more whitish. The apical area extending half way toward the base is brown, tending to dark brick red. The interspaces just within hind margin are heavily dusted with grayish scales from apex half way down to lower angle, forming quite a prominent feature. The basal area is blackish. Fringe of hind margin is the same as on upper surface. The white line of upper surface running from end of discoidal space downwards does not appear on under side.

The ground colour of under side of hind wing is brown, tending to dark brick red. From the centre of costa, extending transversely across to submedian nervure, is a band or area heavily dashed with grayish or whitish scales bending towards base at its central portion. The transparent white spots of upper side are repeated. The two interspaces towards inner margin are dusted with whitish scales, giving an appearance of a continuation of the spots. The hind margin has a fringe of tawny hairs, becoming quite prominent towards anal angle. Within the margin for upper half of wing, the interspaces are heavily dusted with grayish or whitish scales. The inner margin is reddish brown, the two interspaces above being blackish.

Female.—Identical with male, excepting the absence of the white line and its dark ground on fore wings.

Described from specimens taken April 5th, 1899. It is very closely allied to *N. macareus*, Herr Schaff.

A CHANGE OF NAME.

I have been promptly informed by Prof. Cockerell that the name *Phyllostoma*, used by me in the November number, page 290, for a new genus of Lucanidæ, is already in use for a genus of bats. I would therefore propose in its stead *DIPHYLLOSTOMA*. It has become a matter of no small difficulty to select for a new genus a significant name, which has never been used in any department of zoology, and for this reason there is some excuse for the custom in vogue among certain authors of using for generic titles purely meaningless, but euphonious, combinations of letters, or various permutations of the letters in the names of older allied genera. This method of coining generic names certainly possesses the merit of simplicity, since they can be evolved in any required quantity at a moment's notice and with practically no danger of preoccupation. Personally, the custom seems deplorable for several reasons, but I am not disposed to deny that it may be defended on other grounds than expediency.

H. C. FALL.

THE LIFE-HISTORY OF *ARCTIA VIRGUNCULA*, KIRBY.

BY ARTHUR GIBSON, DIVISION OF ENTOMOLOGY, CENTRAL EXPERIMENTAL FARM, OTTAWA.

On the 22nd June, 1901, I received from Mr. A. Kwiat, of Chicago, a batch of eggs of *Arctia virguncula*, Kirby. These eggs were laid on the 18th June and hatched on the 25th and 26th. The following notes on the early stages of the species were taken. A brief description of the mature larva was published by Mr. Coquillett, in the first number of *Papilio*, in 1881.

Egg.—0.8 mm. in diameter, semi-ovoid, about as high as wide, shiny, creamy white at first; before hatching, a shiny lead colour. Under a lens the egg has a reticulated appearance and is slightly concave at base.

Stage I.—Length, 2 mm. Head 0.4 to 0.45 mm. wide, rounded, rather deeply depressed at apex, upper inside portion of cheeks black, shiny; clypeus and lower part of face brownish, ocelli black, mouth-parts blackish; hairs on face, some long and some short, pale and black. On each segment of body is a transverse row of shiny black tubercles. Tubercle i very small, ii and iii large, iv and v smaller than ii and iii; ii, iii, iv and v are surrounded with a wide blotch of reddish-brown. The colour of the skin at first is a dirty cream; after feeding, the larvæ are pale greenish. The reddish blotches surrounding the tubercles give the larvæ a reddish appearance, and the skin in the centre of dorsum against the reddish blotches appears as a dorsal stripe. The hairs from the tubercles are long and slender, those on dorsum being black, while those from lateral and lower tubercles are pale. Thoracic shield black, bearing small black tubercles. Thoracic feet and prolegs semi-translucent, slightly darker exteriorly than ventral surface.

On the 28th June all the larvæ were swollen, and by the morning of the 29th had passed the first moult.

Stage II.—Length, 4.2 mm. Head, 0.55 to 0.6 mm. wide, shiny, shaped as before; upper portion of cheeks blackish, lower portion and clypeus brown, mouth-parts reddish brown, hairs on face long and slender, mostly black on upper portion, pale on lower; some heads have more

black than others. Just after moulting, in general appearance the larvæ are black, but after a day the skin is of a shiny, semi-translucent greenish tint, and the tubercles are each in a field of pale reddish-brown, which, as in Stage I, gives the larvæ a reddish appearance. The dorsal stripe is distinct, of a pale bluish-green colour. The tubercles are large (i very small), shiny black, the dorsal series bearing a bunch of short, barbed, black bristles. Tubercle ii has a shining base. The bristles from lateral and lower tubercles are pale, rather reddish. Spiracles black and very small. Thoracic shield not so conspicuous as in Stage I. Thoracic feet and prolegs concolorous, darkened at tips.

On the 2nd July some of the larvæ passed the second moult, others on the 3rd and 4th.

Stage III.—Length 6.5 mm. Head, 0.8 to 0.9 mm. wide; almost whole upper surface of cheeks dark shiny brown, clypeus and lower portion of cheeks pale—of a yellowish-brown tinge,—mouth-parts blackish, or dull reddish; hairs on face long and short, the long ones mostly black, short ones pale; ocelli black, antennæ brownish, the basal half pale. In general appearance the larvæ in this stage are dark brown. On examination with a lens, the skin is seen to be greenish, covered with brown blotches. The dorsal stripe is pale blue and distinct. The tubercles are shiny black, i very small, ii very large, with a polished base, iii slightly smaller than ii, and iv slightly smaller than iii. Bristles from tubercles distinctly barbed. The colour of the skin between tubercles ii and iii, and iii and iv is yellowish, with a slight reddish tinge. The bristles from dorsal and lateral tubercles are mostly black, but these tubercles also bear a few pale bristles. The bristles from ventral surface are pale and shorter. The dorsal tubercles on segments 12 and 13 bear a few very long bristles. The spiracles are very small, black and close in front of tubercle iv. The thoracic feet and prolegs are concolorous with venter, but are darkened in front.

During the morning of the 6th July a few specimens passed the third moult; others moulted on the 7th, 8th and 9th.

Stage IV.—Length, 10 mm. Head, 1.2 to 1.3 mm. wide, depressed at apex, lobes almost wholly black, space on sides of cheek, just above ocelli, pale brownish; lower front of face brown, with the exception of central portion of clypeus, which is blackish; antennæ brown, pale at base; ocelli black, mouth-parts as before. The larvæ in general

appearance are now deep black, with reddish bristles from lower lateral and ventral tubercles. The dorsal stripe is pale bluish, indistinct in most specimens. The tubercles are large (i small), shiny black, bristles barbed; all tubercles about same proportion as before, ii has a shining base. The bristles from i and ii are mostly pure black, but there are a few pale rust-red bristles intermingled. Those from tubercles iii and iv are mostly pale rust-red, but there are also a few black bristles mixed with these. The bristles from the tubercles below the spiracles are pale rust-red. Spiracles small, black. The dorsal tubercles on the two posterior segments bear a few very long bristles as before. Thoracic feet shiny jet black; prolegs, upper half concolorous with venter, lower half pale, all bearing sparse short hairs. As the larvæ increase in size during this stage, the skin loses its deep black colour, becoming more of a blackish-brown, with the venter rather paler than the dorsum.

On the 12th July about ten specimens passed the fourth moult; others on the 13th and 14th.

Stage V.—Length, 16 mm. Head, 1.5 to 1.6 mm. wide, indented at vertex as before, whole front of face shiny black, with exception of margin of clypeus at sides, which is brown; space on sides of cheek, just above ocelli, pale brownish as before, but now spotted with darker brown; ocelli black, antennæ as before, mouth-parts blackish. Skin of body wholly velvety black. The dorsal stripe has disappeared and is not present in any of the specimens (50). In most of the larvæ the bristles from tubercles i and ii are all black, but in a few specimens many of these bristles are dark reddish. Tubercle iii bears mostly black bristles, with some reddish ones intermingled. From tubercle iv all the bristles but one or two are bright rust-red. Bristles from tubercles v and vi are all bright rust-red, as well as those from ventral tubercles. Spiracles small and black as before, almost touching anterior edge of tubercle iv. Thoracic feet and prolegs as in last stage, setæ on all feet short and concolorous with bristles from ventral and lower tubercles.

On the 16th July one larva passed the fifth moult, and on the 17th and 18th many others moulted.

Stage VI.—Length, 25 mm. Head, 2.0 to 2.2 mm. wide, same as last stage, only the pale space above ocelli has larger spots. Body as in Stage V, with no markings. The reddish bristles from tubercle iv and those from tubercles below spiracles are very bright. The bristles from

tubercles i and ii in most specimens are all black, but some have one or two reddish bristles also. Tubercle iii has mostly black bristles, but also a few reddish ones. Tubercles all black as before, bristles barbed. Spiracles black. Thoracic feet black, setæ mostly pale; prolegs pale reddish, setæ concolorous with bristles from subventral tubercles.

On the 20th July one larva passed the sixth moult, another on the 21st, and others on the following days.

Stage VII.—Length, 31 mm. Head, 2.5 to 3.0 mm. wide, slightly smaller than segment 2, rounded, somewhat quadrate, depressed slightly at vertex, black, shiny, flattened in front; ocelli black, hairs on face all black, with exception of a few pale ones around mouth-parts; antennæ pale at base, dark in centre, and brownish at tip. In some specimens the median suture is pale, also the lower half of the epistoma. Skin of body in many specimens wholly velvety black; in others, same colour, but shading to grayish-black subventrally. Tubercles all black; bristles distinctly barbed. Tubercle i small, about one-third the size of ii; ii with a shining base, larger than iii; iii, iv and v about same size; vi smaller than v. Bristles from i, ii, iii and upper half of iv black, from lower half of iv and other tubercles bright rust-red. In some specimens nearly all the bristles from iv are rust-red. Spiracles black, inconspicuous, almost touching anterior edge of tubercle iv. On segments 12 and 13 there are a few long black hairs. Thoracic feet shiny black, tipped with reddish brown; setæ mostly pale; prolegs, upper portion shiny black, lower portion and claspers reddish; setæ rust-red.

The mature larva at rest is 35 mm. long, and when extended, 40 mm.

On the 28th July two specimens began to spin their cocoons; another on the 1st August, and others soon afterwards.

The cocoon is thin, consisting simply of a slight web of reddish-brown silk covering the pupa, and is enclosed in a leaf or two of the food-plant, which have been drawn together and fastened by threads of silk. Some of the specimens spun up amongst some blades of dry grass which were in the breeding cage.

Pupa.—Length, 22 mm.; width at widest part, 7.5 mm.; black, folds of abdomen faintly dull reddish; pruinose; abdomen bears sparse short, thick hairs, and is minutely pitted; thorax and wing-cases wrinkled. Spiracles dull black, faintly tinged with dark red in centre. Cremaster round, shiny black, terminating in a bunch of about 22–25 capitate dull-reddish bristles.

The first moth emerged on the 11th August, the next on the 17th August, and others on the 19th and 20th August. The average length of the pupal stage was 14 days. In the spring of 1901, the late Mr. T. G. Priddey, of Toronto, sent to the Division a few larvæ of *A. virguncula*. One of these began to spin a cocoon on the 1st May, the moth emerging on the 28th May. Another specimen which began to spin on the 5th May had changed to pupa by the 8th May, and the moth emerged on the 1st June. In these two instances it will be seen that the length of the pupal stage was much longer than that of those mentioned above. Some of the larvæ of the above brood stopped feeding about the middle of August, and acted as if they wanted to hibernate. In September they were put in a cool cellar, but by the middle of October they had all died. These were all mature larvæ, and I cannot account for their not spinning up with the others. At Toronto the writer has taken the moths commonly at light about the middle of June.

Food-plant.—The larvæ described in the present paper, as well as those received in the spring, were fed on plantain and dandelion.

A NEW GENUS OF MYRMELEONIDÆ.

BY NATHAN BANKS, EAST END, VA.

Hagen, in his "Stray Notes on Myrmeleonidæ," published in the CANADIAN ENTOMOLOGIST for 1887 (Vol. XIX., p. 210), called attention to the fact that there are several species of ant-lion-flies in this country which lack tibial spurs. He placed these species in *Maracanda*, McLach., a genus based on one species from Turkestan. McLachlan's description of the genus agrees moderately well with our forms, except in a few minor particulars. But on examining the figure of the Turkestan insect it is at once apparent that our forms are not congeneric with it. The figure [Fedtschenko's Reise in Turkestan, Neuroptera, Plate 1, fig. 1] shows that in *Maracanda* there are five or six crossveins before the origin of the radial sector, and that the first branch of the radial sector arises far beyond the end of anal vein. These characters place the genus in a different section from the species we have included in *Maracanda*.

Moreover, the figure shows that the prothorax is quite broad, and the femora are stated to be lineate with black in the description. The last joint of the labial palpus is said to be much dilated. All these characters are foreign to the species we have wrongly included in *Maracanda*; therefore it becomes necessary to propose a new genus for our species.

Cryptoleon, new genus.

Antennæ about as long as head and prothorax; pronotum rather narrow; legs rather short and not slender, no spurs, anterior tarsus about as long as the tibia; last joint of labial palpi but little swollen. Two or four crossveins before origin of radial sector; first branch of radial sector arises much before the end of anal vein; costals in a single or double series; in the hind wings the cubital fork runs parallel to the anal vein for some distance.

Type, *Myrmeleon conspersus* Rambr.

CURIOUS EFFECT OF THE ATTACK OF AN ASILUS FLY
ON COLIAS PHILODICE.

BY ALBERT F. WINN, WESTMOUNT, P. Q.

During the last week of my holidays at Biddeford, Maine, this summer, *Colias philodice* was abundant and in fine condition, and a great many were taken, in the hope that among them there might be some *C. interior*, but none of this species were found.

On July 19th, however, I noticed on the wing a yellow butterfly whose flight was most peculiar, and on capturing it, it proved to be a ♀ *philodice* in the clutches of a robber-fly (*Asilus* — sp.). Both were immediately put in the cyanide bottle, and about an hour later were folded up in the same paper, and the butterfly was not noticed as being in any way different from the usual well-known colour, but on the evening of July 24th, while looking over my captures with Mr. Chagnon, I came across these two specimens, and, to my surprise, the under side of the *philodice* was, by electric light, of a pale greenish colour. I was still further astonished to find that it was quite soft, although it had been in paper for six days, and all my other specimens were dry. I spread it, without relaxing, and it was duly taken off the boards to show to Mr. Lyman, who, I knew, would be interested in anything odd in the way of a *Colias*.

About a week later Mr. Lyman brought it back to me, remarking that "it was very curious that the colour of the under side should have become that greenish colour, by artificial light, and that *I had better spread it properly*. I thought I had done this already, but a slight breath closed its wings over its back and another flattened them out again. Three weeks more were given it on the setting-board, and it was still soft,

and now, 11 weeks after its capture, it remains, wings, antennæ and all, in as nice a condition for spreading as you could wish,—but it won't stay spread!

NOTE ON *BÆUS*.

BY W. HAGUE HARRINGTON, OTTAWA.

About ten years ago, in sifting swamp mosses for Coleoptera, I met with certain active little insects which, despite their wingless form and almost microscopic size, were recognized as members of the order Hymenoptera. Some of the individuals so captured were afterwards described by Ashmead, in his Monograph of North American Proctotrypidæ, as *Bæus minutus* and *B. piccus*. Subsequently, *B. americanus*, Howard, and *B. niger*, Ashmead, were also discovered at Ottawa. My solitary example of the former species was found sluggishly crawling on the under surface of a stone in the chilly temperature of early spring, and one example of *B. niger* was taken with a sweeping-net at the end of September. With these two exceptions, all my specimens of the genus were taken from moss collected at the beginning of winter. All were females, as might be expected, for it is the females only of bees and wasps, and probably of all hymenoptera hibernating in the imago condition, that survive the winter in these northern lands.

It was, therefore, with much pleasure that, in examining a tube in which a spider's cocoon had been placed, I found that a number of minute creatures had emerged, which required only a glance to show that they belonged to *Bæus*. The cocoon was a small spherical one, of mottled gray colour, about three millimeters in diameter, and was probably constructed by a member of the Theridiidæ. It was collected toward the end of June, but, unfortunately, the tube was laid aside unlabeled, and the time of emergence of the parasites is not known. Many of the spiders had also hatched, and had spun many delicate lines throughout the tube before perishing.

The parasites had apparently emerged later, as the majority of them had been entangled in the spiders' threads. They were twenty-four in number, and, to my delight, four were males, for individuals of which sex my searches had hitherto been in vain. Probably if they had not appeared with the females I should have had considerable difficulty in placing them.

The specimens are apparently referable to the *B. niger* of Ashmead, which is slightly larger than *B. minutus*, and more uniformly coloured. The females are a deep black, with the exception of the pale under surface of the antennal club, and of the tarsi, and, in some instances, of portions of the tibiae, which are more or less piceous.

The males at first glance look larger, but this is due to the more developed thorax and to the presence of the wings. In the female the thorax is the smallest of the three sections of the body, and is almost lost sight of between the large head and abdomen. The head of the male is large, being slightly wider than the thorax, but the abdomen is minute and flattened, and the thorax robust and dorsally prominent. The antennae and the legs, except the coxae, are pale yellow, as in the solitary male of *B. americanus* mentioned by Ashmead. The scape of the antenna does not reach to the anterior ocellus, which is about on a line drawn across the face through the middle of the eyes; it is as long as four of the funicular joints. The pedicel is as long as the two following joints and stouter; the first joint of funicle is longer than second, but not so thick; the following seven joints are submoniliform; the penultimate is slightly longer than thick, and the final joint is small and conical. The two terminal joints are closely appressed, forming a small divided club.

The wings of these four males are much longer than in the individual figured by Ashmead (loc. cit., Plate VIII.), as they extend fully half their length beyond the tip of the abdomen. The marginal vein is situated about one-third of the length of the wing from the base and is as long as the stigmal nervure, while the basal nervure is well defined. Ashmead's figure shows the marginal vein beyond the centre of the wing, and indicates that the specimen figured was one not having fully-developed wings. Such differences in the development of the wings are not uncommon with the Proctotrypids. In the case of such insects as *Bæus*, of which the females are entirely wingless and have the thorax in part atrophied, it is interesting to find males with wings so well developed.

MR. PERCY B. GREGSON, of Waghorn, Alberta, President of the North-west (Canada) Entomological Society, is leaving at once for a visit to England, and does not expect to return till the beginning of March. He begs that his correspondents will abstain from writing to him during his absence, as he would be unable to reply to their communications.

THE COCCIDÆ OF BRITISH NORTH AMERICA.

BY GEO. B. KING, LAWRENCE, MASS.

(Continued from page 315.)

Eulecanium Fitchi, Sign. This seems to be a very serious pest. The specimens sent by Dr. Fletcher came from Mr. J. D. Evans, of Trenton, Ont., and the scales were infesting a plot of six acres of blackberry bushes, just as they were about ready for the market. Fortunately, however, of the first lot received, over one half of the scales were destroyed by a fungus, and of the second lot, about one third at least. Trenton is a new locality for this scale. In addition, the scale insects were infested to a remarkable extent by two species of *Hyperaspis* and two species of Chalcid parasites.

Eulecanium juglandis, Bouché. Very seriously infesting plum trees in Nova Scotia. Coll., Prof. Mackay. This is a new locality.

Eulecanium Canadense, Ckll. This has been found on maple and elm at Arnstein, Ont., which is a new locality.

Aspidiotus perniciosus, Comst. I received this on twigs of gray willow growing at London, Ont. Coll., J. Dearness.

Aspidiotus ancylus, Putn. This was sent by Mr. Dearness, on plum and shell-bark hickory from East Essex Co., Opt.

Aspidiotus hederæ, Vall. Received from Mr. Dearness, who found it on English ivy on a house-plant set out of doors, at London, Ont.

Chionaspis Lintneri, Comst. Found on leather-wood (*Dirca palustris*) growing near the shore of Lake Huron, in mixed woods, about 40 miles from London, Ont., May, 1899. Coll., Mr. Dearness. The food-plant and locality are new.

Chionaspis pinifoliae, Fitch. On exotic pine at Leamington, Ont., and on Austrian and Scotch pine at London, Ont. Coll., Mr. Dearness.

Chionaspis furfurus, Fitch. Two lots of this scale were received on bark of mountain ash from Ridgetown, Ont., and one lot on twigs of apple from London, Ont. Coll., Mr. Dearness.

NEW SPECIES.

Pulvinaria viburni, n. sp. (Native.) ♀.—Scale 4 mm. long, $3\frac{1}{2}$ wide, to 5 long and 4 wide. Colour, red-brown. Ovisac, clear white. Texture, the same as in *P. innumerabilis*. Boiled in caustic potash the skin becomes colourless. Antennæ of 8 joints, measuring as follows in μ : Joint 1 (36), 2 (40), 3 (60), 4 (48), 5 (36), 6 (24), 7 (24), 8 (40). Formula 34(28)(15)(67). Leg: coxa 112; femur, with trochanters,

180; tibia 136; tarsus 80. Stigmatal spines in threes, one long and thin, two short and stout. Marginal spines numerous, simple, $24\ \mu$ long.

Hab.—On *Viburnum pubescens* in the woods at Aylmer, Prov. Quebec, about nine miles from Ottawa; on the same twigs were *Eulecanium corylifex*, Fitch. Coll., Dr. Fletcher. This species is allied to *P. innumerabilis*, *P. tilie* and *P. marmorata*, and I thought at first it was the last species, but it seems to be distinct.

Eulecanium Guignardi, n. sp. (Native.) ♀.—Scale coffee-brown, 5 mm. long, $3\frac{1}{2}$ broad, $2\frac{1}{2}$ high. The smaller, which were more numerous, 4 mm. long, $2\frac{1}{2}$ broad and 2 high. Dorsum quite convex. Texture of the scale thin, somewhat shiny. Cleared and mounted, well-boiled examples are colourless, while those not so are of a yellowish-brown. Skin minutely pitted. Antennæ 7-jointed. Measurements in μ : Joint 1 (48), 2 (44), 3 (60), 4 (64), 5 (28), 6 (24), 7 (52). Sometimes joints 3 and 4 are equal; 1 and 2 seem to be variable, often equal, and in this case they would measure $40\ \mu$ long, respectively; joint 7 is very constant at $52\ \mu$ long. Legs ordinary. Margin with two rows of spines, one short and stout, the other short, thin and sharp, 16 and $8\ \mu$, respectively. Spines of the lateral cleft in threes, nearly of equal lengths, although in some the centre one would be the longest.

Hab.—On plum trees at Niagara, Ont.; sent to me from the Division of Entomology of the Canadian Department of Agriculture, and named after J. A. Guignard, Asst. Entomologist, Experimental Farm, Ottawa. Newly-hatched larvæ translucent, with a slight tinge of pale green and with a distinct dark greenish-gray dorsal longitudinal band. In about six days the colour changes to a light yellow. (Antennæ 6-jointed: Joint 1 (20), 2 (12), 3 (28), 4 (12), 5 (16), 6 (32). Front leg: coxa 24; femur and trochanter 52; tibia 40; tarsus $24\ \mu$ long. Anal tubercles long, each with one long bristle and one short spine. Marginal spines $12\ \mu$ long. Anal ring normal, with 6 bristles. The above described species has considerable resemblance to *Eulecanium vini* of Europe, but is described as new, after a careful study of various species and reference to all the literature at my disposal.

Lecanium pini, n. sp. (Native.) ♀.—Scale dark coffee-brown, 5 mm. long, 4 broad, 3 high. Antennæ rudimentary, although in some examples studied some showed a distinct three-jointed antenna, joint 2 longest, 9 a little longer than 1, measuring in μ : Joint 1 (20), 2 (48), 3 (28). Length of the antenna $96\ \mu$. The third joint has a few short

hairs, about seven. Legs apparently wanting. Derm colourless, with the posterior half showing small round gland-pits. Posterior incision very long. Anal plates and around the anal area dark yellow. Newly-hatched larvæ dark ochreous, of the ordinary type, indistinctly 6-jointed, seemingly with only 5 distinct joints: Joint 1 (20), 2 (24), 3 (56), 4 (32), 5 (52). Front leg: coxa 44; femur and trochanter 80; tibia 56; tarsus 48 μ long. Anal tubercles with one long bristle and two short spines. Rostral loop large.

Hab.—On *Linus Austriaca*, London, Ont. Coll., Mr. John Dearness. Received since from Prof. E. P. Felt, State Entomologist of New York. Prof. Felt's scales were taken at Kierner, N. Y., and are seemingly rare, as he found only a few at this time. Mr. Dearness found his in quantities. In each case the scales were attached to the crowns of the leaves. As to the newly-hatched larvæ of *Lecanium* and *Eulecanium*, I wish to remark that in all the species yet studied by me, in the legs the tarsus is always shorter than the tibia. Mr. Maskell, Trans. N. Z. Inst., Vol. XXVIII., 1895, figures the larva of a typical *Lecanium*, and says of the legs that the tibiæ are shorter than the tarsi. He does not say of what species, however.

Eulecanium Lymani, n. sp. ♀.—Scale red-brown, distinctly pointed at each end, convex. Texture very thin, 3 and 4 mm. long, $2\frac{1}{2}$ broad, $1\frac{1}{2}$ high. Antennæ 6- and 7-jointed.

Measurements of joints in μ :

Joint —	1	2	3	4	5	6	7
	32	40	56	40	24	24	48
	40	40	52	52	24	20	44
	32	40	100	20	24	48	

Middle leg: coxa 60; femur and trochanter 140; tibia 100; tarsus 64 μ long. Marginal spines short, sharp, 20 μ long, easily lost in boiling. Derm yellowish; no pits observed.

Hab.—On a young oak at Quebec. The tree was 10 ft. high, growing by the roadside, adjoining a grove of trees, and quite a distance from any farm, house or garden. The upper part of the tree was very badly affected. Collected by Mr. Henry H. Lyman, after whom I have the pleasure of naming the species. Allied to such species as *Eulecanium Macluratum*, Ckll. It seems to be very distinct and much different from any other *Eulecanium* found to infest oak trees. Just recently the Dominion Entomologist sent me the same thing on oak. Coll., Miss Lucy I. May, at North Hatley, Quebec.

Eulecanium rosæ, n. sp. (Native.) ♀.—Scale in many examples studied practically hemispherical, resembling in shape a small split-pea. Approximate size 4 mm. long, $3\frac{1}{2}$ broad, 3 high. The colour is variable in the adult stage, light red-brown to a yellow-brown, considerably wrinkled and pitted, with a dull glossy surface. Texture moderately thick. Cleared and viewed by transmitted light, the skin is brownish, showing many round gland-pits of two sizes. Antennæ 6- and 7-jointed, measuring in μ :

Joint—	1	2	3	4	5	6	7
	44	44	56	52	24	20	48
	40	44	96	24	24	44	

Joint one has 1 long hair; two 1 short; three has 2 long ones near the constricted end of the joint; four and five each have a short hair; six has 3 short, and seven has three whorls of hairs. Leg: coxa 80; femur 72; trochanter 128; tibia 112; tarsus 60; tarsal digitules 40 μ long; claw digitules 24 μ long. Width of coxa 52 μ , of the trochanter 40 μ .

Hab.—On rosebush at Sherbrooke, Quebec; found by Mrs. Brooks (Dr. Fletcher in litt.). *E. rosæ* differs very materially from the European *Lecanium* (*Eulecanium rosarum*) by the scale being nearly circular in outline, and having a 6- and 7-jointed antenna, while *E. rosarum* has a 7- and 8-jointed antenna.

(To be continued.)

CORRIGENDUM.—Page 315, instead of lines 4-6, read: "♀ Kahn-förmig, im Alten über halbkuglig, uneben, dunkelbraun. Die Eier ohne wollige Einhüllung. Länge 3 Linien. Am Weinstocke."

A NEW MEALY-BUG ON GRASS-ROOTS.

BY T. D. A. AND W. P. COCKERELL, EAST LAS VEGAS, N. M.

Dactylopius roseotinctus, n. sp.

Form and size about as in *D. Citri*; pink, distinctly segmented, with a slight covering of mealy powder; caudal tassels short but well-developed; lateral fringe of tassels very short, irregular, but plainly visible in fresh specimens. Females full of young show no signs of producing ovisacs.

Antennæ 8-jointed, joints measuring in μ : (1) 45-66, (2) 51-60, (3) 45-48, (4) 39-45, (5) 42-45, (6) 30-36, (7) 30-36, (8) 84-93. Middle leg: Femur and trochanter 240 μ , tibia 210, tarsus (without claw) 78.

Breadth of femur, 84 μ . Labium, length 135, breadth 90 μ . Caudal bristles and bristles of anal ring of the same length, 120 μ .

Boiled in caustic potash, the females turn bright red.

Hab.—Romeroville, New Mexico, on roots of grass, Nov. 9, 1901 (*W. P. Cockerell*).

Closely allied to *D. salinus*, Ckll. (from California), but the femora are stouter, the labium is broader, and the caudal bristles are much longer. The antennæ are curiously like those of the Brazilian *D. secretus*, Hempel. *D. roseotinctus* is also very similar to *D. trifolii* (Forbes), which has a lateral fringe, but there are various small differences, and the colour is not the same.

ENTOMOLOGICAL SOCIETY OF ONTARIO.

The thirty-eighth annual meeting of the Society was held in London on the 13th and 14th of November. The first morning was taken up with a business meeting of the Council. In the afternoon a conference on the San José scale in Ontario took place. Mr. Fisher, the Provincial Inspector, gave an interesting account of the present condition of the infested localities and of the work which had been undertaken for the repression of the insect during the past year. He also described very fully the remedies employed and the apparatus which had been found most useful. Dr. Fletcher gave some account of his observations in several parts of the country and in Ohio, and spoke in the highest terms of the good work done by Mr. Fisher and the wise measures adopted by the Department of Agriculture since the first outbreak of the pest. Prof. Webster (of Ohio) related his experience in dealing with the problem, which was the same in Ontario as in Ohio, and gave much useful information on the subject. The Hon. John Dryden, Minister of Agriculture for Ontario, in closing the discussion, spoke of the great difficulty he had to contend with owing to the refusal of the people in general to believe in the dangerous character of the scale. This Society, and the Fruit-growers' Association, should do their utmost to educate the public on this matter, and so lead them to co-operate in all measures that were adopted. He felt much encouraged by what he had heard that afternoon, and would continue to do his utmost for the extermination of the pest.

In the evening a public meeting was held at the Normal School and was very well attended. The Hon. John Dryden, who presided, spoke in very high terms of the Society and the good work it had done during a

long series of years. * He considered it one of the most useful associations connected with his Department, and expressed the great pleasure it gave him to be present at its annual meeting.

The Rev. Dr. Fyles read his presidential address on "The Importance of Entomological Studies to the Community at Large," illustrated with beautiful diagrams that he had himself prepared. Dr. Fletcher gave an address on "The Value of Nature Study in Education," and at the close exhibited a number of lantern pictures which showed the beauty and perfection of common objects in nature.

On Thursday, November 14th, the various reports of the directors, officers, branches and sections were read, and a large number of interesting and valuable papers. These will be published in full in the forthcoming Annual Report. The election of officers resulted as follows:

President—Rev. T. W. Fyles, D.C.L., F.L.S., South Quebec.

Vice-President—Professor William Lochhead, Ontario Agricultural College, Guelph.

Secretary—William E. Saunders, London.

Treasurer—J. H. Bowman, London.

Directors: Division No. 1—C. H. Young, Ottawa.

Division No. 2—J. D. Evans, Trenton.

Division No. 3—E. M. Walker, Toronto.

Division No. 4—G. E. Fisher, Freeman.

Division No. 5—J. A. Balkwill, London.

Directors Ex-officio (ex-Presidents of the Society)—Professor Wm. Saunders, LL.D., F.R.S.C., F.L.S., Director of the Experimental Farms, Ottawa; Rev. C. J. S. Bethune, M.A., D.C.L., F.R.S.C., London; James Fletcher, LL.D., F.R.S.C., F.L.S., Entomologist and Botanist, Experimental Farms, Ottawa; W. H. Harrington, F.R.S.C., Ottawa; John Dearnness, Normal School, London; Henry H. Lyman, M.A., Montreal.

Director Ex-officio (Ontario Agricultural College)—Professor Wm. Lochhead, Guelph.

Librarian and Curator—J. Alston Moffat, London.

Auditors—J. A. Balkwill and W. H. Hamilton, London.

Editor of the Canadian Entomologist—Rev. Dr. Bethune, London.

Editing Committee—Dr. J. Fletcher, Ottawa; H. H. Lyman, Montreal; J. D. Evans, Trenton; W. H. Harrington, Ottawa; Prof. Lochhead, Guelph.

Delegate to the Royal Society—Rev. Dr. Bethune, London.

Delegates to the Western Fair—J. A. Balkwill and W. E. Saunders, London.

Committee on Field Days—The Chairmen of the Sections and Dr. Woolverton, Messrs. Balkwill, Bowman, Law, Moffat, Rennie, and Saunders, London.

Library and Rooms Committee—Messrs. Balkwill, Bethune, Bowman, Dearness, Moffat, and Saunders, London.

NOTE ON THE GENERIC TITLE BURTIA.

BY A. RADCLIFFE GROTE, HILDESHEIM, GERMANY.

The generic title *Burtia* was proposed by me in the first part of the Notes on the Zygenidæ of Cuba, read February 12, 1866, before the Ent. Soc. Phil., and published in July of the same year. The genus is, however, incorrectly dated "1867" by Kirby in his catalogue of 1892, where *B. rubella* seems also wrongly given as a synonym of *Gundlachia cruenta*, H.-S., the two species being presumably distinct. Now, Moeschler had previously, in 1890 (Lep. Porto Rico, p. 349), given "*Horamia plumosa*, H.-S.," as a synonym of *B. rubella*, and "*G. cruenta*" as a synonym of *Callicarus pennipes*, thus according to my paper priority over Herrich-Schaeffer's in the Correspondenz Blatt, although these reversed references may chiefly show that Moeschler could not make out H.-S. descriptions, which are usually scanty. Kirby (p. 129) also gives *pennipes* the preference over *plumosa*, a name I cannot find in Hampson. From my copy, evidently not the original issue, I cannot find out the exact date for *Gundlachia*. Kirby dates *H. pretellus*, H.-S., as "Aug., 1866," a month later than *Gundlachia* or *Eurtia*, though the former is, in my copy, on the previous page of Corr. Blatt. Under the circumstances that my paper was read in February, 1866, that Moeschler prefers *Burtia* in 1890, and that I figure it, I think my name should hold for the Cuban genus over *Gundlachia*, even if both appeared in the same month—July, 1866. Sir G. Hampson copies Kirby's wrong date of "1867" for *Burtia*, and, evidently misled by this, gives my name as a synonym, while separating the two species, *B. cruenta* and *B. rubella*, and figuring *rubella* on Plate XIII., Fig. 9, of his exhaustive work on the Syntomids. In the Philadelphia Check List the name *Burtia* is unnecessarily used for the Florida *Didasys belæ*, Grote, the two genera being distinct. I am not able to account for Kirby giving the date of "1867" for the genus *Callicarus*, Grote, 1866, a name he also misspells, and which is described in the same paper with *Burtia*. Probably the correct date for *Horamia plumosa*, H.-S., is August, while that of *Callicarus pennipes*, Grote, is certainly July, 1866.

SPECIES OF BRACHYCISTIS (FAM. MYRMOSIDÆ) FROM SOUTHERN CALIFORNIA.

BY T. D. A. COCKERELL, EAST LAS VEGAS, N. M.

Brachycistis gaudii, n. sp.—♂. Length about $6\frac{1}{2}$ mm.; shining black, brown on prothorax, at bases of wings, and at extreme (usually covered) bases of abdominal segments; antennæ long, dull reddish-brown, first joint of flagellum equal to second; head broader than thorax; eyes very prominent; ocelli in an equilateral triangle, the area between them elevated; edge of clypeus, and mandibles, dark ferruginous, the latter tridentate; mesothorax shining, hairs and punctures very sparse; metathorax minutely transversely lineolate; tegulæ light ferruginous; wings hyaline, iridescent, nervures pale except the costal, stigma large, dark brown; three submarginal cells and two recurrent nervures, the second recurrent sometimes failing below; marginal cell extremely short, broader than long, its greatest diameter about half length of stigma; first submarginal large, extending along stigma to marginal; second submarginal minute, triangular, entirely cut off from marginal; third submarginal minute, long and narrow, its tip reaching marginal; first recurrent nervure joining first transverso-cubital, second joining third submarginal cell near its base; abdomen shining, very sparsely punctured, with long sparse yellowish hairs; first segment swollen, about twice as long as broad, with a deep constriction between it and the second; apical curved spine long, ferruginous; legs black, knees, apices of tibiæ and tarsi light brown.

Hab.—La Jolla, San Diego Co., California, at light, Aug., 1901. 3♂. Allied to *B. elegantulus*, but different in colour, and the venation is not quite the same. Also related to *B. contiguus*, Fox, but the middle segment is not finely punctured posteriorly, and the venation differs.

Brachycistis carinatus, Fox, 1899.—San Pedro, Cal., July 9; La Jolla, Cal., August. Three males. The eyes are black, not pale castaneous as Fox describes; perhaps his specimen had been in alcohol. This insect comes to lights at night, and represents *B. glabrellus* on the coast of Southern California. It was hitherto known from one example, vaguely said to be from California.

We regret to record the death of Mr. P. C. Truman, of Volga, South Dakota, which occurred on the 27th of October, the result of an attack of pneumonia. He began collecting insects about seventeen years ago, and by diligent work succeeded in forming what is considered to be the finest collection of Lepidoptera in the North-western States, and also a good collection of Coleoptera.

Mailed December 10th, 1901.

